

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

FORM 3

AMENDED REPORT ☐  
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: <b>ML 47967</b>	6. SURFACE: <b>State</b>
1A. TYPE OF WORK: <b>DRILL</b> <input checked="" type="checkbox"/> <b>REENTER</b> <input type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL: <b>OIL</b> <input type="checkbox"/> <b>GAS</b> <input checked="" type="checkbox"/> <b>OTHER</b> _____ <b>SINGLE ZONE</b> <input checked="" type="checkbox"/> <b>MULTIPLE ZONE</b> <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: <b>CrownQuest Operating, LLC</b>				9. WELL NAME and NUMBER: <b>Dragon State 1-13</b>	
3. ADDRESS OF OPERATOR: <b>P.O. Box 2221</b> CITY <b>Farmington</b> STATE <b>NM</b> ZIP <b>87499</b>			PHONE NUMBER: <b>(505) 325-5750</b>		
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>666' F<sup>3</sup>L x 693' FWL</b> <i>664310X    37.827343</i> AT PROPOSED PRODUCING ZONE: <b>same</b> <i>4188096Y    109.133028</i>				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWNE 13 34S 25E</b> <i>W</i>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>10 miles east of Monticello</b>				12. COUNTY: <b>San Juan</b>	
				13. STATE: <b>UTAH</b>	
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>666'</b>		16. NUMBER OF ACRES IN LEASE: <b>680</b>		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>160</b>	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>1839'</b>		19. PROPOSED DEPTH: <b>5,960</b>		20. BOND DESCRIPTION: <b>RLB 0007554</b>	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>6746' GL</b>		22. APPROXIMATE DATE WORK WILL START: <b>2/15/2008</b>		23. ESTIMATED DURATION: <b>60 days</b>	

24. PROPOSED CASING AND CEMENTING PROGRAM						
SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT	
16"	13 3/8"	H40	48	150	class 'G', 250 sks	1.15 cf/sk    15.8 ppg
12 1/4"	9 5/8"	J55	36	2,200	65/35 Poz, 550 sks	1.75 cf/sk    12.8 ppg
					class 'G', 100 sks	1.15 cf/sk    15.8 ppg
7 7/8"	5 1/2"	P110	17	5,920	25/75 Poz, 575 sks	1.74 cf/sk    11.8 ppg
					LiteCrete, 300 sks	1.61 cf/sk    12.5 ppg

<b>25. ATTACHMENTS</b>	
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:	
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER <input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) <u><b>Robert R. Griffiee</b></u>	TITLE <u><b>Operations Manager</b></u>
SIGNATURE <u><i>Robert R. Griffiee</i></u>	DATE <u><b>8/24/2007</b></u>

(This space for State use only)

API NUMBER ASSIGNED: **43037-31869**

APPROVAL:

**RECEIVED**  
**AUG 31 2007**

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

FORM 3

AMENDED REPORT ☐  
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: <b>ML 47967</b>	6. SURFACE: <b>State, LEE</b>
1A. TYPE OF WORK: <b>DRILL</b> <input checked="" type="checkbox"/> <b>REENTER</b> <input type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL: <b>OIL</b> <input type="checkbox"/> <b>GAS</b> <input checked="" type="checkbox"/> <b>OTHER</b> _____ <b>SINGLE ZONE</b> <input checked="" type="checkbox"/> <b>MULTIPLE ZONE</b> <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: <b>CrownQuest Operating, LLC</b>				9. WELL NAME and NUMBER: <b>Dragon State 1-13</b>	
3. ADDRESS OF OPERATOR: <b>P.O. Box 2221</b> CITY <b>Farmington</b> STATE <b>NM</b> ZIP <b>87499</b>			PHONE NUMBER: <b>(505) 325-5750</b>	10. FIELD AND POOL, OR WILDCAT: <b>Wildcat</b>	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: <b>666' FSL x 693' FWL</b> <i>664310X    37.827343</i> AT PROPOSED PRODUCING ZONE: <b>same</b> <i>4188094Y    109.133028</i>				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWNE 13 34S 25E</b> <i>W</i>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>10 miles east of Monticello</b>				12. COUNTY: <b>San Juan</b>	13. STATE: <b>UTAH</b>
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>666'</b>		16. NUMBER OF ACRES IN LEASE: <b>680</b>		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>160</b>	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>1839'</b>		19. PROPOSED DEPTH: <b>5,960</b>		20. BOND DESCRIPTION: <b>RLB 0007554</b>	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>6746' GL</b>		22. APPROXIMATE DATE WORK WILL START: <b>2/15/2008</b>		23. ESTIMATED DURATION: <b>60 days</b>	

24. PROPOSED CASING AND CEMENTING PROGRAM						
SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
16"	13 3/8"    H40    48	150	class 'G', 250 sks	1.15 cf/sk	15.8 ppg	
12 1/4"	9 5/8"    J55    36	2,200	65/35 Poz, 550 sks	1.75 cf/sk	12.8 ppg	
			class 'G', 100 sks	1.15 cf/sk	15.8 ppg	
7 7/8"	5 1/2"    P110    17	5,920	25/75 Poz, 575 sks	1.74 cf/sk	11.8 ppg	
			LiteCrete, 300 sks	1.61 cf/sk	12.5 ppg	

25. ATTACHMENTS	
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:	
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER  <input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN  <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) <u>Robert R. Griffie</u>	TITLE <u>Operations Manager</u>
SIGNATURE <u><i>Robert R. Griffie</i></u>	DATE <u>8/24/2007</u>

(This space for State use only)

API NUMBER ASSIGNED: 43-037-31869

APPROVAL:

**RECEIVED**  
**AUG 31 2007**

# UTAH WELL LOCATION PLAT

OPERATOR Crown Quest Operating  
 LEASE Dragon State WELL NO. 1-13  
 SECTION 13 TOWNSHIP 34 South RANGE 25 East Salt Lake, P.M.  
 COUNTY San Juan UTAH

FOOTAGE LOCATION OF WELL: 666.29' FEET FROM THE North LINE and  
692.81' FEET FROM THE West LINE and

GROUND LEVEL ELEVATION: 6745.90'





SURFACE USE WITHIN 200' RADIUS: No Improvements Within 200'

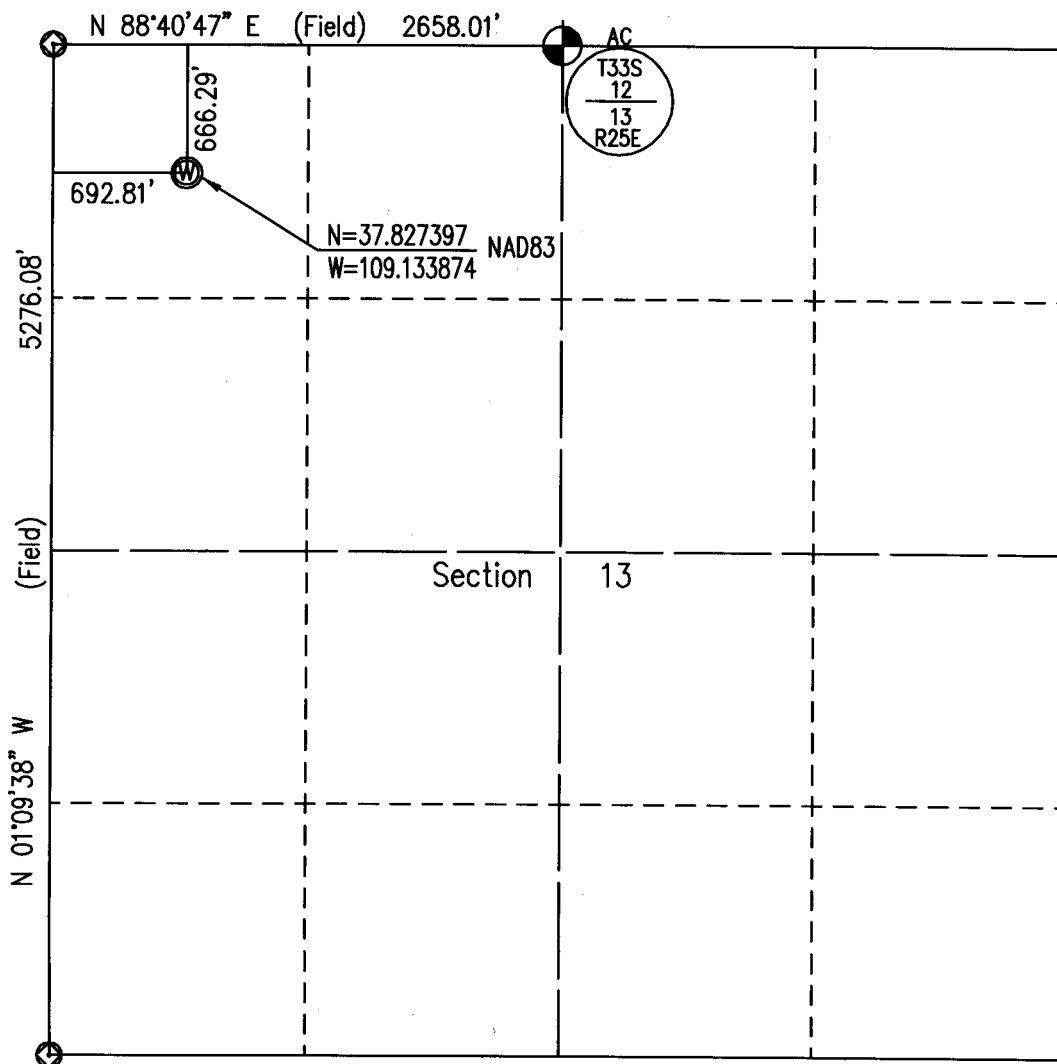
BASIS OF BEARING: GPS Data

BASIS OF ELEVATION: GPS Data - NAD 83 - PODP #4

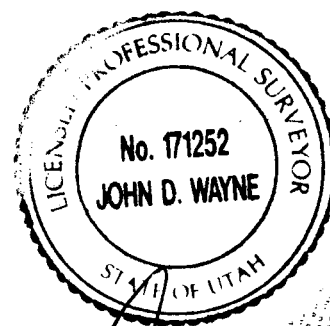
500' 500'  
 1" = 1000'

Some information on this plat is based on information taken from previous surveys, record information, or collateral evidence and may not reflect that which may be disclosed by a complete boundary survey. This plat is not to be relied on for the establishment of surface boundaries, fences, buildings, or other future improvements.

-  GLO BC
-  WELL Location
-  STONE Marked
-  ALUMINUM CAP
- CALCULATED CORNER



I hereby certify that the proposed well location shown on this plat was prepared from field notes of an actual survey by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief, and that there are no visible improvements within 200 feet of this proposed wellhead, unless noted otherwise.



John D. Wayne  
 Professional L.S. #171252  
 State of Utah

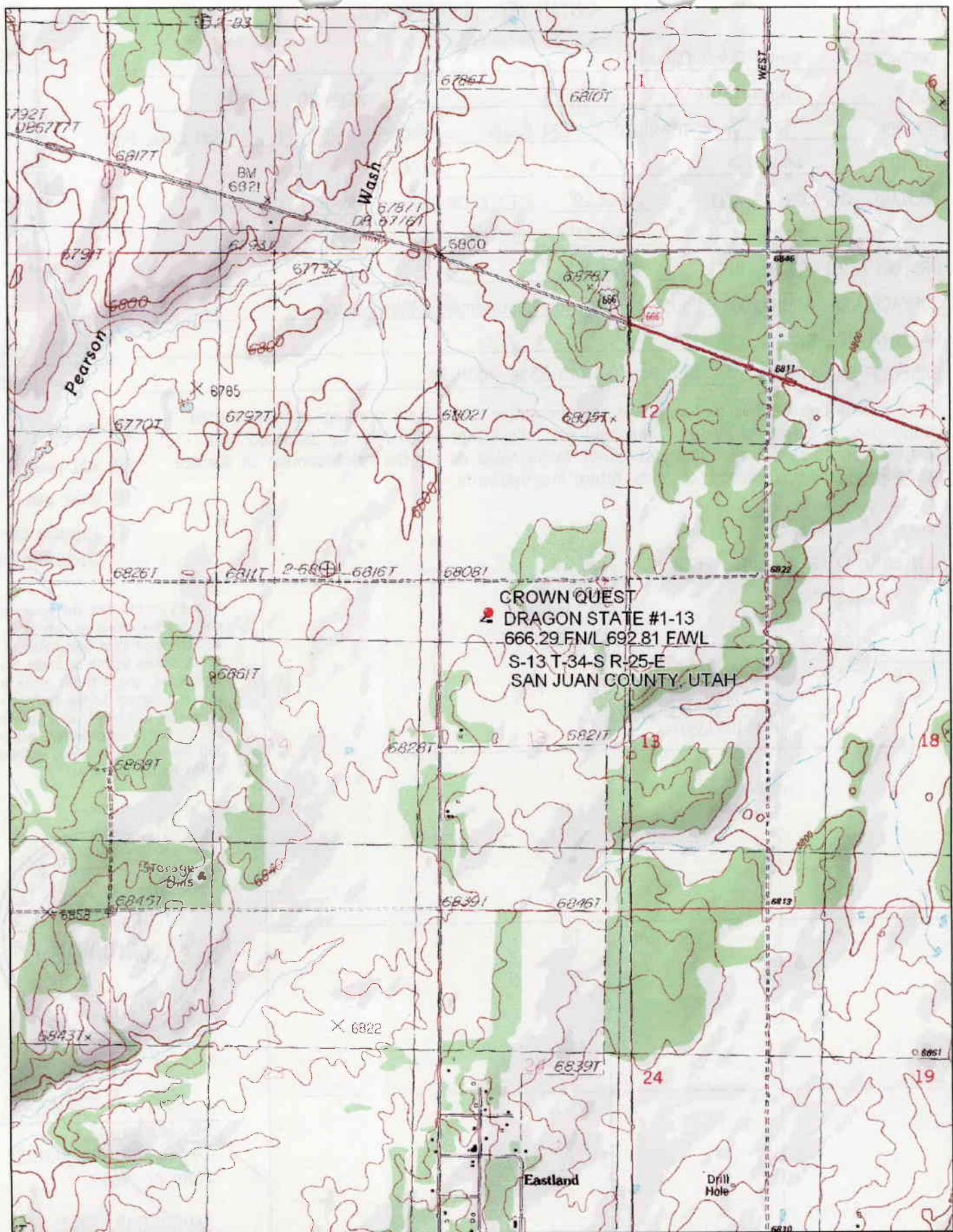
AUGUST 16, 2007

Date Surveyed:

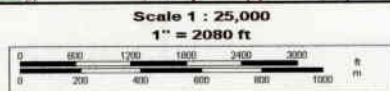
AUGUST 20, 2007

Date Platted:

SCALE: 1" = 1000'



© 2002 DeLorme, 3-D TopoQuads®. Data copyright of content owner.  
www.delorme.com



**Drilling Plan**

**Well Name:** Dragon State 1-13

**Surface Location:** 666' FSL x 693' FWL, Section 13, T34S, R25E  
San Juan County, Utah

**Target Formation:** Pennsylvanian

**Elevation:** 6746' GL

**Geology:**

Formation	Top	Probable Content
Morrison	Surface	
Entrada Ss	1055'	potential fresh water
Navajo Ss	1235'	potential fresh water
Chinle Fm	1945'	vari-color shale
Shinarump Ss	2465'	gas/water
Moenkopi Fm	2620'	brn-red sltst/sh
Cutler (top of Permian)	2945'	prpl crs ss/sh; potential fresh water
Honaker Trail (top of Penn)	4360'	ls; potential gas, brine
Upper Ismay	5590'	gas/oil/brine
Desert Creek	5825'	gas/oil/brine
TD	5960'	

*Surface Casing Seat*  
*2900' Base of Moderately Saline Groundwater*

**Logging Program:** Triple Combo including Induction, Neutron/Density, and Sonic logs from TD to surface casing shoe.

**Clean-out Fluid Program:**

Interval	Fluid Type	Weight	Viscosity	Fluid Loss
0' - 2200'	fresh water/gel	8.4 ppg	n/a	no control
2200' - 5960'	fresh water/gel/polymer	9.2 ppg	30 - 80 sec	10

**Casing Program:**

Interval	Hole Diameter	Csg Size	Wt.	Grade	Thread
Conductor					
0' - 150'	16"	13 3/8"	48 ppf	H40	STC
Surface					
0' - 2200'	12 1/4"	9 5/8"	36 ppf	J-55	LTC
Production					
0' - 5960'	7 7/8"	5 1/2"	17 ppf	P110	LTC

**Tubing Program:** 0 - 5800', 2 3/8", 4.7 ppf, J55, EUE

## **BOPE and Wellhead Specifications and Testing:**

For drilling operations from conductor casing shoe to 2200': 13 5/8", 2000 psi, threaded casing head with two 2" outlets. 13 5/8", 2000 psi double gate BOP and 2000 psi choke manifold (see figures 1 and 2). Pressure test conductor casing to 600 psi prior to drilling out of conductor casing shoe. Pressure test BOPE to 2000 psi.

For drilling operations from surface casing shoe to TD (5920'): Cut off 13 5/8" casing and casing head. Install 9 5/8", 3000 psi, SOW casing head. 11", 3000 psi double ram BOP and 3000 psi annular preventor. 3000 psi choke manifold (see figures 3 and 4). Pressure test BOPE to 3000 psi and 9 5/8" surface casing to 3000 psi prior to drilling out of surface casing shoe.

For completion operations: 5 1/2" x 2 3/8", 5000 psi tree assembly. 7 1/16", 5000 psi double gate BOP system. 5000 psi choke manifold (see figures 3 and 4). Pressure test 5 1/2" casing to 5000 psi prior to frac'ing. The 5000 psi pressure rating is for possible frac treatment pressures and is far in excess of 3000 psi BOP equipment required to control anticipated formation pressure.

### **General Operation:**

- Actuate pipe rams once each day during clean-out operations. Actuate blind rams once each trip.
- An upper Kelly cock valve, with handle, will be available on the rig floor to fit each drilling string.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in the daily drilling report.
- Blind and pipe rams will be equipped with extension hand wheels.

## **Cementing Program:**

13 3/8" Conductor Casing String: Run casing with saw-tooth guide shoe on bottom, insert float valve one joint from bottom, and install 1 bow-spring centralizer in the middle of the 1<sup>st</sup> joint and one at 88'. Cement to surface with 250 sks class 'G' with 1/4 #/sk celloflake and 2% CaCl<sub>2</sub> (1.15 cf/sk, 15.8 ppg). Perform top job as necessary. This string may be set with a rat-hole machine prior to moving on the drilling rig.

9 5/8" Surface Casing String: Run casing with swirl pattern guide shoe on bottom and non-differential fill float collar one joint from bottom. Centralize with one centralizer in the middle of the first joint, one centralizer every other collar for the next three collars, and one centralizer inside the conductor casing shoe. Cement to surface with 550 sks 65/35 poz + 6% gel + 6 #/sk gilsonite + .25 #/sk celloflake (12.8 ppg, 1.75 cf/sk), followed by 100 sks class 'G' + 2% CaCl<sub>2</sub> (15.8 ppg, 1.15 cf/sk).

5 1/2" Production Casing String: Run casing with float shoe on bottom, float collar one joint from bottom. Install one centralizer in the middle of the first joint, one on every other collar from TD to the top of the Honaker Trail formation, and one inside the surface casing shoe. Cement with



575 sks 25/75 Poz TXI blend (11.8 ppg, 1.74 cf/sk) followed with 300 sks LiteCrete + gas block (12.5 ppg, 1.61 cf/sk) Top of cement calculated to be at 1500'.

**Special Drilling Operations:**

None anticipated

**Additional Information:**

- This well is designed to be completed in the Pennsylvanian formations.
- Bottom-hole pressure is calculated to be 2515 psi at 5590', 0.45 psi/ft. Adequate weighting material will be kept on location to maintain mud weight.
- LCM will be added to the mud system as required to maintain circulation.
- Estimated formation pressures:
  - Ismay 2515 psi
  - Desert Creek 2621 psi

**Completion Information:**

The completion procedure will be prepared after cased-hole logs are analyzed. The well will be completed by frac and acid treatments.

Prepared by: Robert R. Griffie  
Operations Manager  
Date: 8/24/07

Dragon State # 1-13  
Thirteen Point Surface Use Plan

1) Existing Roads

- a) The proposed route to the location is shown on the attached Topographical Map.
- b) The well pad is located approximately 2 miles North of Eastland Township, Utah.
- c) If necessary, an encroachment permit will be obtained from San Juan County, Utah for use of the existing county roads (CR #312, & CR #338). Approximately 1 mile of CR #312 and 1/2 mile of CR #338, will be used to access the well site.

2) Access Road

- a) Approximately 660' of flat bladed road off CR #338 provides access to the well site.
- b) No cattle guards will be required.
- c) There are no existing roads outside the lease or unit boundary for which a right-of-way is required .

b) Location of existing wells

See attached Topographical Map for the location of existing wells in the area of this proposed well site.

c) Location of Production Facilities

- a. In the event the well is brought to production, necessary production equipment will be determined and a diagram will be submitted showing the layout of such equipment on the location site.
- b. Off-site facilities: No off-site facilities are required.
- c. Pipelines: Pipeline design, construction, and permitting will be performed if needed after it is determined that the well is productive.

All permanent (in place for six months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded. Colors will be as follows: Juniper Green.

All site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 shall be followed.



If a gas meter run is constructed it will be located on the lease within 500 feet of the well head. The gas flow line will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and /or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

If a tank battery is constructed on this lease, it will be surrounded by a berm of sufficient capacity to contain 1 ½ times the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All oil production and measurement shall conform to the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 4.

Production facilities on location may include a lined or unlined production water pit as specified. If water is produced from the well an OOGO #7 application must be submitted.

d) Location and Type of Water Supply

All water needed for drilling and completion purposes will be obtained from the City of Monticello, Utah ( SW 1/4, Section 30, T33S, R24E.).

e) Source of Construction Material

It is not anticipated that additional construction materials will be required for construction of the well pad, pit, and access road for drilling operations. Gravel and rock for upgrading the access roads to Class III Standards will be obtained from a private source, if needed. If additional materials are required, they will be obtained from a private source. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

f) Methods of Handling Waste Water Disposal

All garbage and trash materials will be contained in a trash cage and removed from the site for proper disposal as necessary, but no later than at the conclusion of drilling operations. Portable toilets will be provided and serviced appropriately.

The first 6 inches of top soil will be removed, stockpiled along the Northern edge of the well pad and reserved for reclamation. The drill pad is approximately 300' x 300'. The reserve pit is in the Southeast corner of the drill pad and is approximately 150' x 75' x 10' with 3:1 slopes. Upon inspection, the reserve will be re-lined if necessary. Three sides of the reserve pit will be fenced prior to drilling operations and the fourth side of the pit will be fenced when drilling operations cease. The fence will be constructed using 32" woven wire topped with two smooth wire strands 4" and 16" above the woven wire. Steel T-posts will be set 16.5' apart and two stays will be used between the posts. Corner posts will be

2' H Posts or more and anchored. The fence will be kept in repair while the pit dries. It is anticipated 2-3 days will be needed to dress up the well pad, reserve pit and access. No new surface disturbance is anticipated. The reserve pit is located in the cut, with 100% of the pit volume being below the original ground level. Wildlife protection, consisting of appropriate netting, will be used to cover the reserve pit.

g) Ancillary Facilities

N/A

h) Well Site Layout

All existing wells in the vicinity of this well pad are shown on the attached Topographical Map. Access to the well pad will be shown on the Topographical Map.

i) Plans for Restoration of the Surface

The top 6 inches of topsoil material will be removed from the location and stockpiled separately on the north side of the pad.

Immediately upon completion of drilling, all equipment that is not necessary for production will be removed.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry.

All road surfaces will be removed prior to the rehabilitation of roads.

Reclaimed roads will have the berms and cuts reduced and will be closed to vehicle use.

All disturbed areas will be re-contoured to replicate the natural slope.

The stockpiled topsoil will be evenly distributed over the disturbed area.

In the event the well is abandoned an abandonment marker will be placed below ground level. The marker will supply the operator name, lease number, well name and surveyed description ( township, range, section and either quarter-quarter or footages).

11) Surface and Mineral Ownership

The surface is Fee and the minerals are owned by the State of Utah.

12) Other Information

a) Archaeological Concerns: None

If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and will contact the authorized officer (AO). Within five (5) working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
- a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that the mitigation is appropriate.
- If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide the technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will be allowed to resume construction.


b) Threatened and Endangered Species Concerns: No known concerns.

c) Wildlife Seasonal Restrictions (yes/no): Deer Winter Range December 15 – April 30.

d) Off Location Geophysical Testing: N/A

e) Drainage crossing that require additional State or Federal approval: N/A

f) Other: Anticipated spud date, October 15, 2007.

  
Donal W. Key  
Surface Operations  
August 27, 2007

## CONTACT LIST

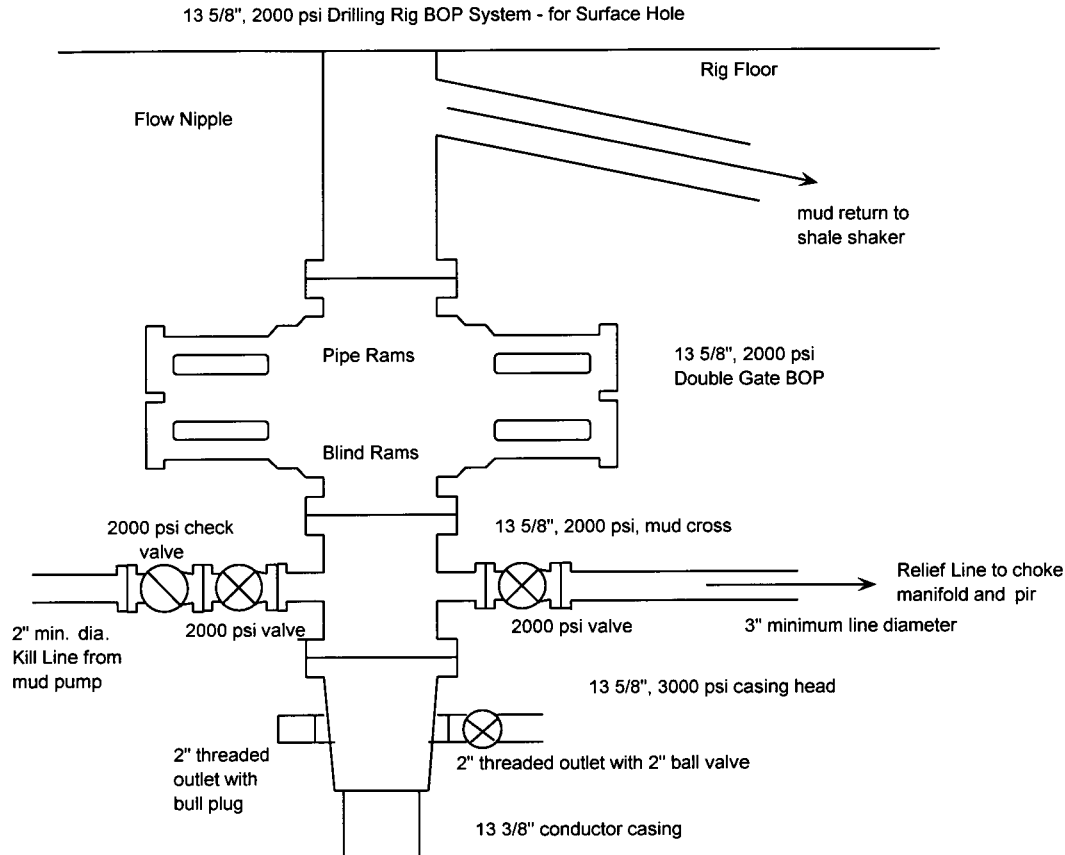
### Utah Projects

CrownQuest Operating , LLC  
303 Veterans Airpark Ln  
P.O. Box 53310  
Midland, Texas 79710  
Tommy Lent, PE, Vice President-Operations & Engineering  
432-818-0300

CrownQuest Operating, LLC  
P.O. Box 2221 \* 2600 Farmington Ave.  
Farmington, NM 87499  
Robert R. Griffee, PE, Operations Manager & CQ Agent  
505-326-6813  
Fax: 505-326-6814  
Donal Key, Surface Operations  
505-716-2543  
Fax: 505-326-6814

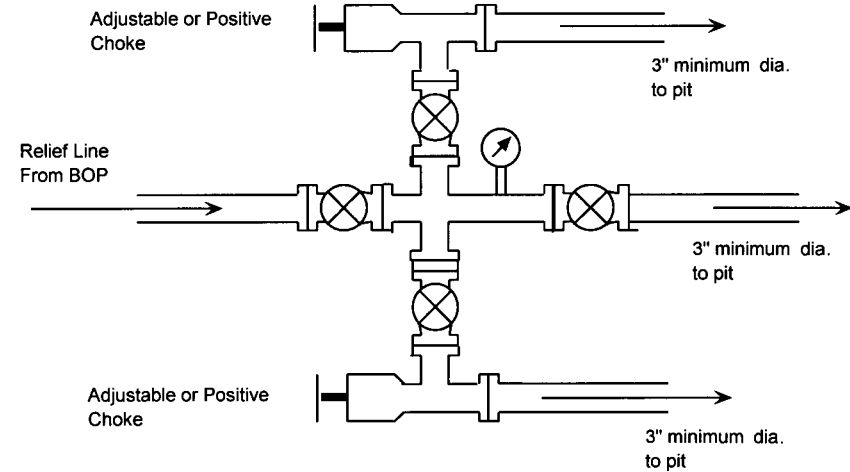
Basin Surveying, Inc  
P.O. Box 6456  
Farmington, NM 87499  
108 Llano, Aztec NM 87410  
John D. Wayne, P.L.S.  
505-334-1500  
Fax: 505-334-1498

Figure 1



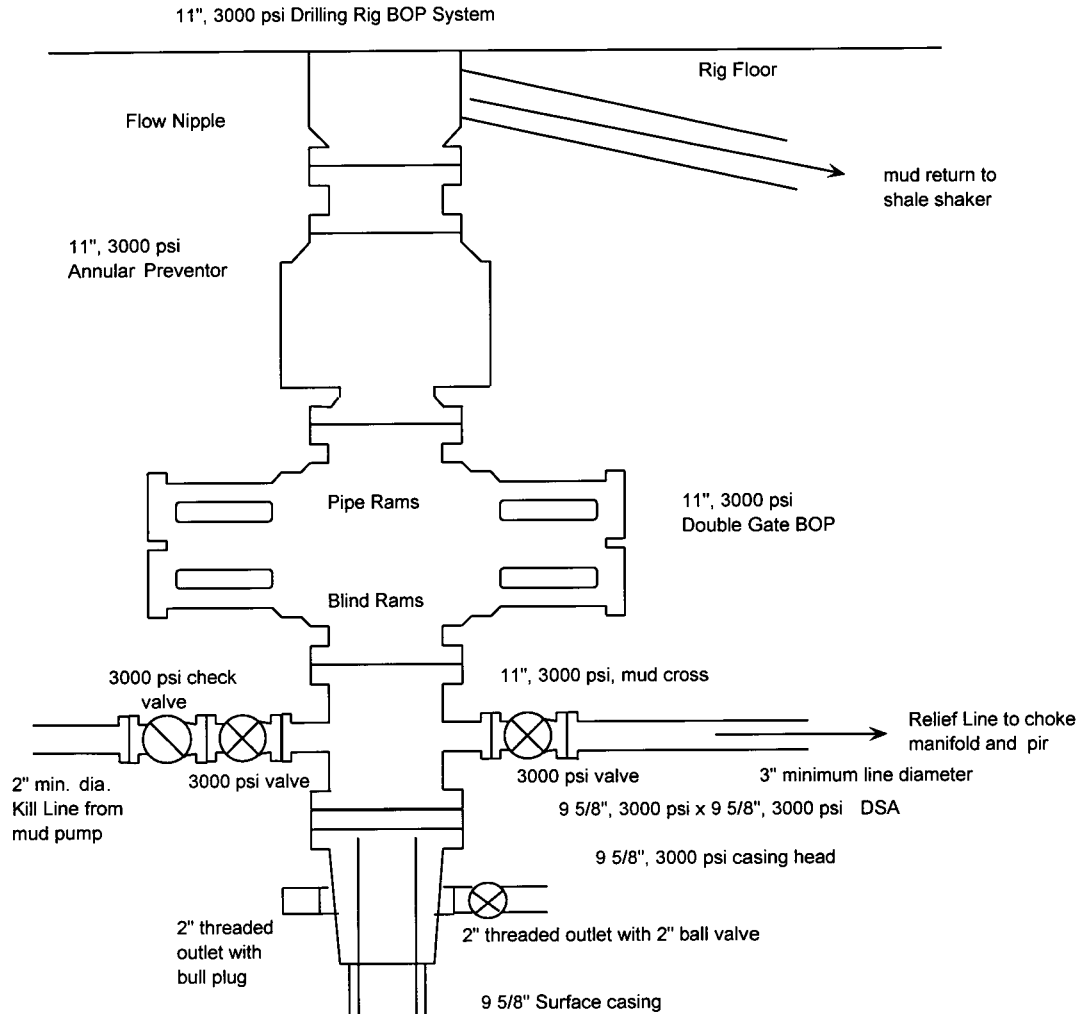
BOP Installation from Conductor Casing depth (150') to Intermediate Casing depth (2200').  
13 5/8", 2000 psi double gate BOP equipped with blind and pipe rams. All equipment rated at 2000 psi or greater working pressure.

Figure 2



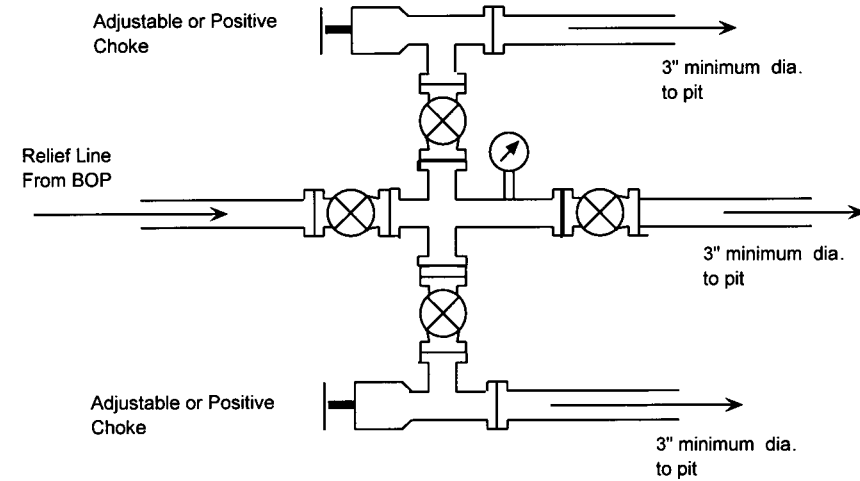
Choke manifold for BOP system shown in Figure 1.  
All equipment to be rated at 2000 psi or greater.

Figure 3



BOP Installation from Surface Casing depth (2200') to TD (5920'). 11", 3000 psi double gate BOP equipped with blind and pipe rams, 11" Annular BOP. All equipment rated at 3000 psi or greater working pressure.

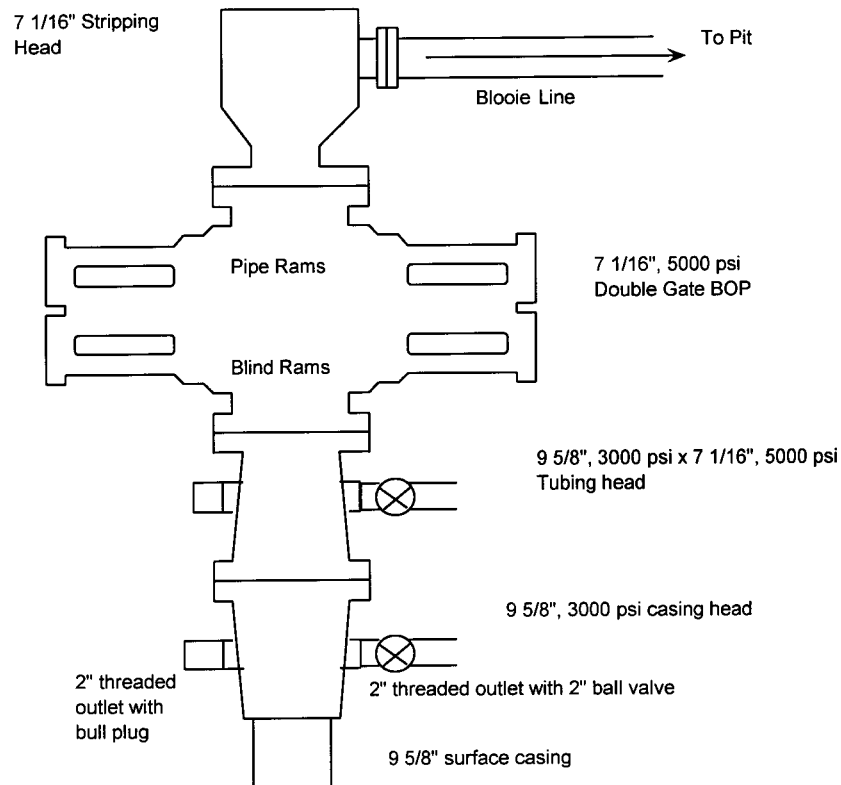
Figure 4



Choke manifold for BOP system shown in Figure 3. All equipment to be rated at 3000 psi or greater.

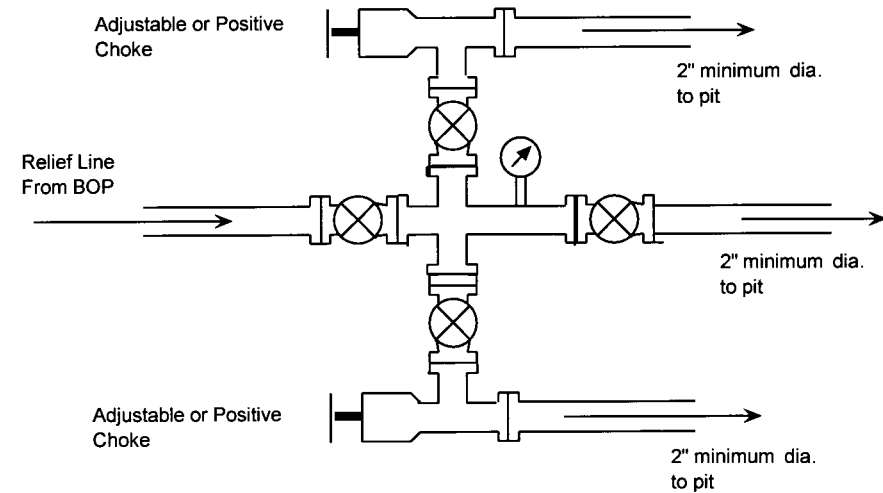
# Figure 5

7 1/16", 5000 psi Completion Rig BOP System



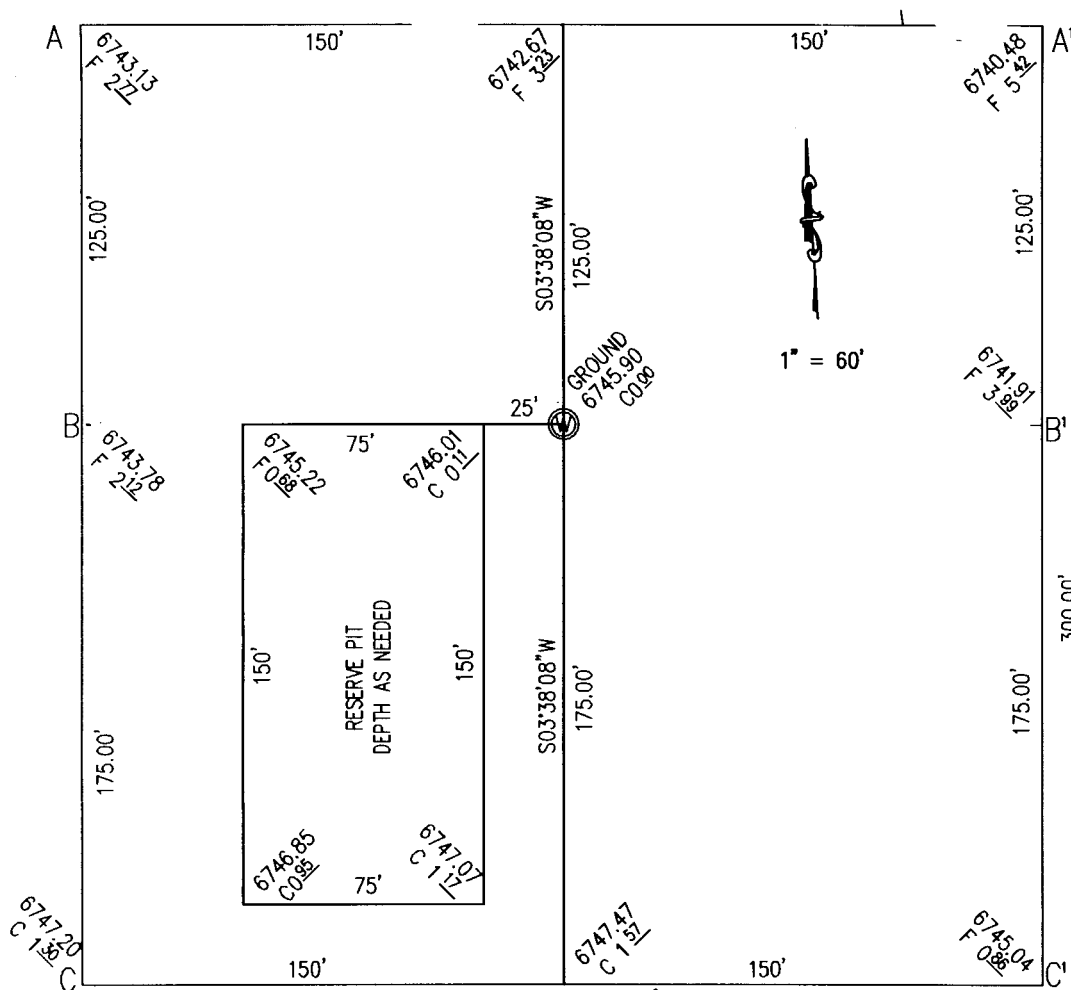
BOP Installation for Completion operations. 7 1/16", 5000 psi double gate BOP equipped with blind and pipe rams. All equipment rated at 5000 psi or greater working pressure.

# Figure 6



Choke manifold for BOP system shown in Figure 5.  
All equipment to be rated at 5000 psi or greater.





Crown Quest Operating  
 OPERATOR  
 Dragon State #1-13  
 WELL NAME and NUMBER  
 666.29' F/NL 692.81' F/WL  
 FOOTAGES  

13	34S	25E
SEC.	TWP.	RGE.
N37.827397°	W109.133874°	83
LAT.	LONG.	NAD

 PODP #4  
 GPS  
 San Juan, Utah  
 COUNTY STATE  
 REVISED DATE:  
 August 16, 2007  
 DATE

SCALE  
 Horiz. 1" = 50'  
 Vert. 1" = 30'

A - A'

6756						
6746						
6736						
6726						

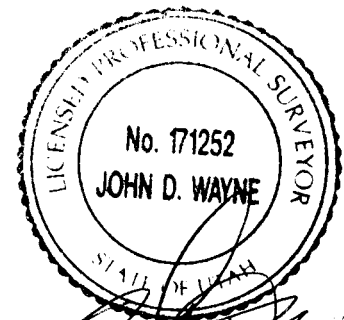
B - B'

6756						
6746						
6736						
6726						

C - C'

6766						
6756						
6746						
6736						
6726						

SECTION 11  
T-34-S R-25-E



SEC.	TWP.	RGE.	1/4 SEC.	WIDTH	LENGTH			ACRES	<b>CROWN QUEST OPERATING          PROPOSED RIGHT-OF-WAY &amp; PIPELINE          DRAGON STATE #1-13          Sec. 13, T-34-S, R-25-E, S.L.B.M.            San Juan County, Utah</b>
					FEET	RODS	MILES		
13	34S	25E	NW1/4	50'	698.49'	42.33	0.13	0.80	
TOTALS					698.49'	42.33	0.13	0.80	SCALE: 1"=200' DATE: 08/22/07

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 08/31/2007

API NO. ASSIGNED: 43-037-31869

WELL NAME: DRAGON ST 1-13

OPERATOR: CROWNQUEST OPERATING, ( N2685 )

CONTACT: ROBERT GRIFFEE

PHONE NUMBER: 505-325-5750

PROPOSED LOCATION:

*SW SW* NWNW 13 340S 250E

SURFACE: 0666 FNL 0693 FWL

BOTTOM: 0666 FNL 0693 FWL

COUNTY: SAN JUAN

LATITUDE: 37.82734 LONGITUDE: -109.1330

UTM SURF EASTINGS: 664310 NORTHINGS: 4188096

FIELD NAME: WILDCAT ( 1 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	<i>DWD</i>	<i>11/21/07</i>
Geology		
Surface		

LEASE TYPE: 3 - State

LEASE NUMBER: ML 47967

SURFACE OWNER: ~~3 - State~~ *FEE*

PROPOSED FORMATION: DSCR

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- ☒ Plat
- ☒ Bond: Fed[] Ind[] Sta[] Fee[]  
(No. RLB0007554 )
- ☒ Potash (Y/N)
- ☒ Oil Shale 190-5 (B) or 190-3 or 190-13
- ☒ Water Permit  
(No. MUNICIPAL )
- ☒ RDCC Review *(Y/N)*  
(Date: 09/25/2007 )
- ☒ Fee Surf Agreement *(Y/N)*
- ☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

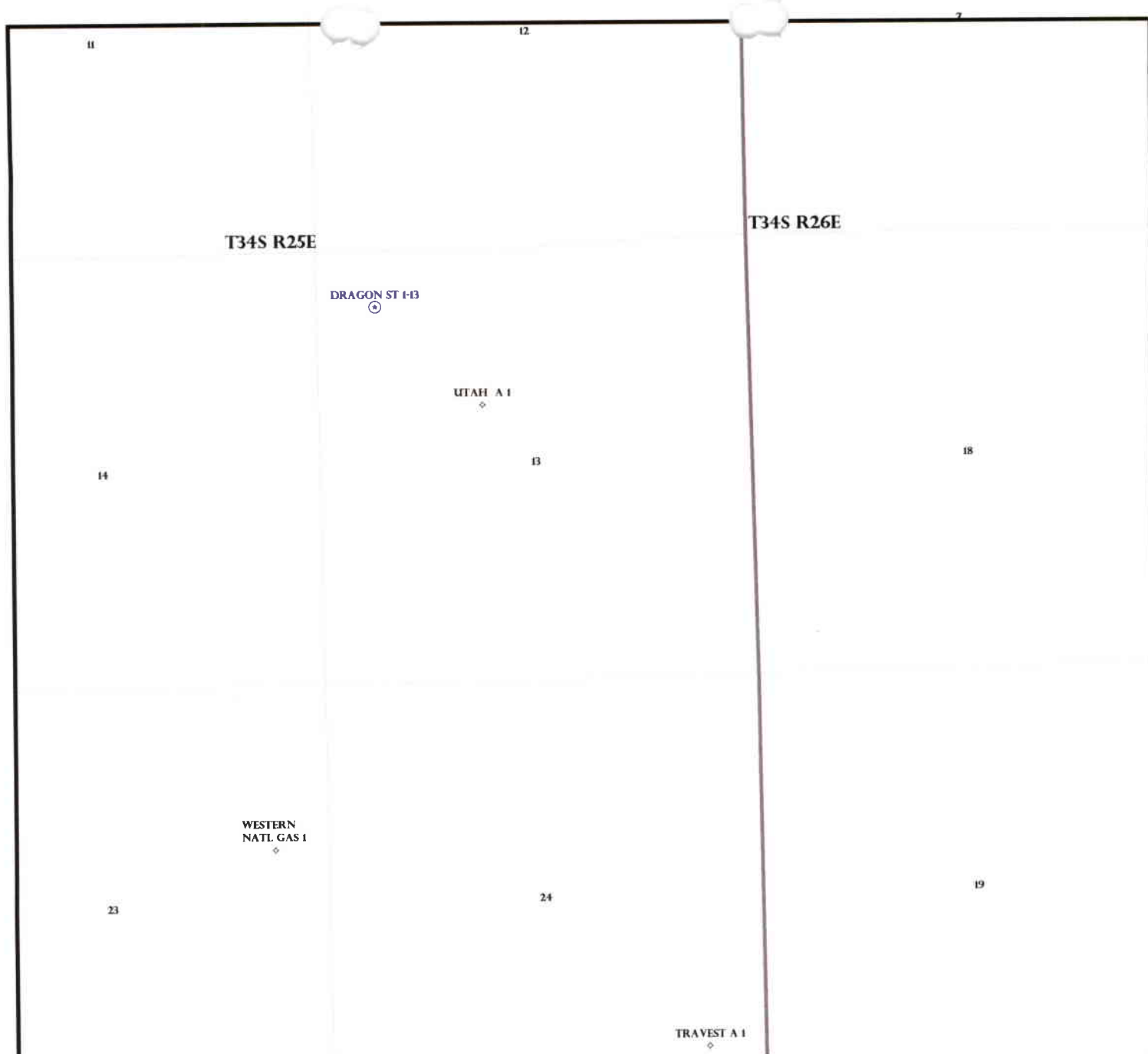
- R649-2-3.
- Unit:
- ☒ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No:       
Eff Date:       
Siting:
- R649-3-11. Directional Drill

COMMENTS:

*Needs Permit (09-24-07)*

STIPULATIONS:

- 1- Spacing Strip*
- 2- STATEMENT OF BASIS*
- 3- Surface Csg Cont Strip*



OPERATOR: CROWNQUEST OPER (N2685)

SEC: 13 T.34S R. 25E

FIELD: WILDCAT (001)

COUNTY: SAN JUAN

SPACING: R649-3-2 / GENERAL SITING

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

**Unit Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

**Wells Status**

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING



PREPARED BY: DIANA MASON  
DATE: 10-SEPTEMBER-2007

# Application for Permit to Drill

## Statement of Basis

11/21/2007

Utah Division of Oil, Gas and Mining

Page 1

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Ownr</b>	<b>CBM</b>
537	43-037-31869-00-00		GW	S	No
<b>Operator</b>	CROWNQUEST OPERATING, LLC		<b>Surface Owner-APD</b>		
<b>Well Name</b>	DRAGON ST 1-13		<b>Unit</b>		
<b>Field</b>	UNDESIGNATED		<b>Type of Work</b>		
<b>Location</b>	NWNW 13 34S 25E S 666 FNL 693 FWL GPS Coord (UTM) 664310E 4188096N				

### Geologic Statement of Basis

Significant volumes of high quality ground water are likely to be encountered at this location. A moderately permeable soil is likely to be developed on Quaternary eolian loess surface deposits in the area. A thin Mancos shale fringe may be encountered below the loess, otherwise the relatively thin Dakota Sandstone/Burro Canyon Formation and thicker subjacent Morrison Formation will be drilled near the surface. Several nearby water supply wells that are documented in the Division of Water Rights database reveal that the water table was encountered between 120 and 170 feet of depth, most likely in the Dakota Sandstone. Nine underground sources of water have been filed on within a mile. The base of moderately saline ground water in a nearby well was determined to be at about 3,850' of elevation, which corresponds to the Moenkopi Formation at around 2,900' TD according to the geologic prognosis. It is likely that fresh water may also be found in the Morrison Formation, the Entrada Sandstone, and the Navajo Sandstone. The proposed drilling, casing and cementing program should adequately isolate any zones of fresh water that may be penetrated. A benign mud system is proposed.

Chris Kierst  
APD Evaluator

11/7/2007  
Date / Time

### Surface Statement of Basis

On-site evaluation completed September 24, 2007, attending: Bart Kettle-Division of Oil, Gas and Mining (DOGM), Ed Bonner-Trust Lands Administration (SITLA), Kyle Beagley-Division of Wildlife Resources (DWR), Donal Key-CrownQuest Operating, LLC

Reserve pit requires a liner to prevent migration of materials into shallow high quality water zones commonly found within the project area. A fence will be required around the reserve pit to prevent entrance and entrapment of livestock and wildlife.

Bart Kettle  
Onsite Evaluator

9/24/2007  
Date / Time

### Conditions of Approval / Application for Permit to Drill

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

# **ON-SITE PREDRILL EVALUATION**

## **Utah Division of Oil, Gas and Mining**

**Operator** CROWNQUEST OPERATING, LLC  
**Well Name** DRAGON ST 1-13  
**API Number** 43-037-31869-0 **APD No** 537 **Field/Unit** UNDESIGNATED  
**Location:** 1/4,1/4 NWNW **Sec** 13 **Tw** 34S **Rng** 25E 666 FNL 693 FWL  
**GPS Coord (UTM)** **Surface Owner**

### **Participants**

Bart Kettle-Division of Oil, Gas and Mining (DOGM), Ed Bonner-Trust Lands Administration (SITLA), Kyle Beagley-Division of Wildlife Resources (DWR), Donal Key-CrownQuest Operating, LLC

### **Regional/Local Setting & Topography**

Proposed project location is ~10 miles east of Monticello, San Juan County, Utah. The immediate area surrounding the proposed well is a mixture of CRP and dry land agriculture fields. Project is staked on fee surface owned by Robert Christensen of St. George. Access to this well will be along existing County maintained roads and approximately 660' of upgraded two track access across lands currently held by Mr. Christensen. Regionally the project site is located along the eastern edge of the Canyon lands portion of the Colorado Plateau. Topography is a series of large mesas cut by sandstone outcrops and narrow canyons. Drainage is to the southwest entering Montezuma Creek within 15 miles. Locally a majority of the surface is being used for dry land farming or CRP pastures.

### **Surface Use Plan**

#### **Current Surface Use**

Grazing  
Agricultural  
Wildlife Habitat

#### **New Road**

<b>Miles</b>	<b>Well Pad</b>		<b>Src Const Material</b>	<b>Surface Formation</b>
0.1	<b>Width</b> 250	<b>Length</b> 300	Onsite	DKTA

**Ancillary Facilities** N

### **Waste Management Plan Adequate? Y**

### **Environmental Parameters**

**Affected Floodplains and/or Wetland** N

#### **Flora / Fauna**

Dry land field in fallow

#### **Soil Type and Characteristics**

Deep orange loam mancos mixture

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diversion Required? N**

**Berm Required? N**

**Erosion Sedimentation Control Required? N**

**Paleo Survey Run? N      Paleo Potential Observed? N      Cultural Survey Run? N      Cultural Resources? N**

**Reserve Pit**

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	100 to 200	5
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Salt or Detrimental	10
Annual Precipitation (inches)	10 to 20	5
Affected Populations	<10	0
Presence Nearby Utility Conduits	Not Present	0
Final Score		35    1    Sensitivity Level

**Characteristics / Requirements**

**Closed Loop Mud Required? N    Liner Required? Y    Liner Thickness    16    Pit Underlayment Required? N**


**Other Observations / Comments**

Proposed project stacked in the center of 40 acre parcel currently being farmed in a dry land rotation. Surface owner is Robert Christensen contacted via phone calls and e-mail. Per conversation with Mr. Christensen no comments concerning DOGM permitting process or surface resource concerns pertaining to permitting. Concerns revolving around Surface Use Agreement mainly stemming from damage compensation amounts and salt contamination from well fluids.

Bart Kettle  
Evaluator

9/24/2007  
Date / Time



 **Online Services** **Agency List** **Business**

**Utah Division of Water Rights**

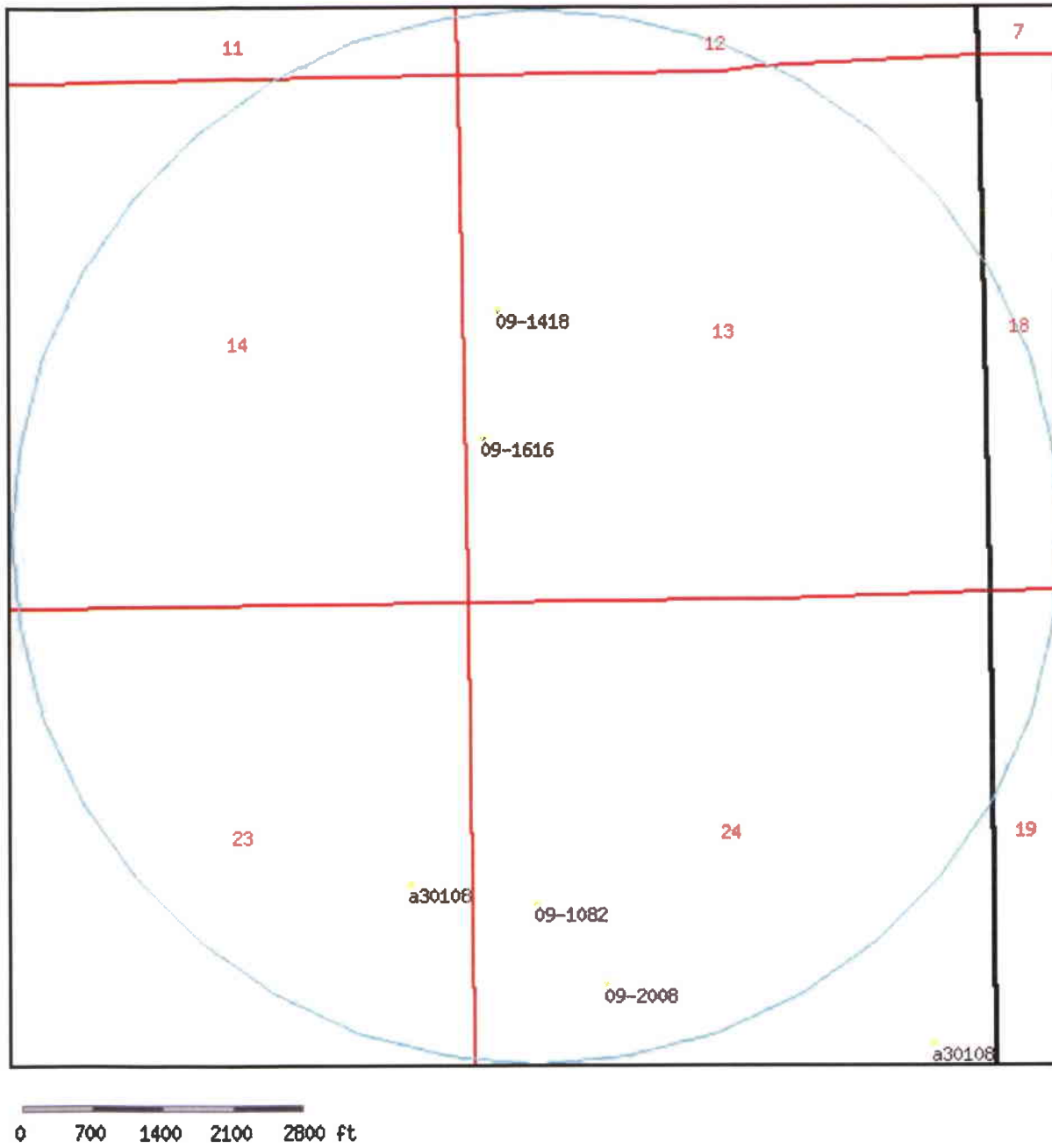
Search



**WRPLAT Program Output Listing**

**Version: 2007.04.13.01      Rundate: 11/07/2007 11:41 AM**

**Radius search of 5280 feet from a point N666 E693 from the SW corner, section 13, Township 34S, Range 25E, SL b&m Criteria:wrtypes=W,C,E  
podtypes=S,U,Sp status=U,A,P usetypes=all**



## Water Rights

WR Number	Diversion Type/Location	Well Log	Status	Priority	Uses	CFS	ACFT	Owner Name
<u>09-1082</u>	Underground S360 E635 W4 24 34S 25E SL		A	19781012	DS	0.015	0.000	JAMES L. & FRANCIS L. ROGERS  EAST ROUTE
<u>09-1418</u>	Underground N300 E350 W4 13 34S 25E SL	<u>well info</u>	P	19850402	DIS	0.007	0.000	RACHEL M. RICHARDON  EAST ROUTE
<u>09-1616</u>	Underground N1600 W2480 S4 13 34S 25E SL	<u>well info</u>	P	19881116	DS	0.015	0.000	JAMES N. BARRY  EAST ROUTE
<u>09-2008</u>	Underground N1475 E1305 SW 24 34S 25E SL		A	19990201	DIS	0.000	4.730	LA VIDA DULCE  P.O. BOX 1116
<u>09-2163</u>	Underground S152 W628 E4 23 34S 25E SL		A	20050418	M	0.000	100.000	EASTLAND SPECIAL SERVICE DISTRICT  HC 63 BOX 52
<u>09-2163</u>	Underground N785 W660 SE 24 34S 25E SL		A	20050418	M	0.000	100.000	EASTLAND SPECIAL SERVICE DISTRICT  HC 63 BOX 52
<u>09-400</u>	Underground N785 W660 SE 24 34S 25E SL		P	19340723	DS	0.067	0.000	EASTLAND SPECIAL SERVICE DISTRICT  HC 63 BOX 52
<u>a30108</u>	Underground S152 W628 E4 23 34S 25E SL		A	20050418	M	0.000	14.600	EASTLAND SPECIAL SERVICE DISTRICT  HC 63 BOX 52
<u>a30108</u>	Underground  N785 W660 SE 24 34S		A	20050418	M	0.000	14.600	EASTLAND SPECIAL SERVICE DISTRICT  HC 63 BOX 52

25E SL

[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)

[Online Services](#)[Agency List](#)[Business](#)

Search Utah.gov



# Utah Division of Water Rights



## Activity

#	WIN	Drilling Company	Activity Type	Activity Begin Date
1	19832	Certified Drillers Ltd.	New	09/19/1985

## Well Features

#	WIN	Drilling Method	Total Bore Depth	Finished Well Depth	Finished Casing Diameter	Well Intake Depth	Geologic Log
1	19832	Air Rotary	0	0	0	0	No

## Comments

#	Datestamp	Text
No comment records found for this location		

## Water Level Records

#	WIN	Date	Time	Depth	Status	Method
1	19832	09/19/1985		120	Static	

## Water Quality Records

#	WIN	Date	Time	Parameter	Value
No water quality records found for this location					

[View Well Log](#)[Done](#)[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)

[Online Services](#)[Agency List](#)[Business](#)Search Utah.gov **GO**

# Utah Division of Water Rights

## Activity

#	WIN	Drilling Company	Activity Type	Activity Begin Date
1	19833	TRACY DRILLING COMPANY	New	04/01/1989

## Well Features

#	WIN	Drilling Method	Total Bore Depth	Finished Well Depth	Finished Casing Diameter	Well Intake Depth	Geologic Log
1	19833	N/A	245	245	6.63	245	No

## Comments

#	Datestamp	Text
No comment records found for this location		

## Water Level Records

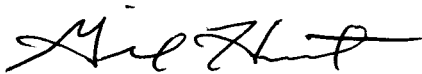
#	WIN	Date	Time	Depth	Status	Method
1	19833	04/20/1989		170	Static	

## Water Quality Records

#	WIN	Date	Time	Parameter	Value
No water quality records found for this location					

[View Well Log](#)[Done](#)[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)

**STATE ACTIONS**  
**Resource Development Coordinating Committee**  
**Public Lands Policy Coordination Office**  
**5110 State Office Building**  
**SLC, UT 84114**  
**Phone No. 537-9230**

<b>1. State Agency</b> Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	<b>2. Approximate date project will start:</b>  Upon Approval or September 25, 2007
<b>3. Title of proposed action:</b> Application for Permit to Drill	
<b>4. Description of Project:</b>  CrownQuest Operating, LLC proposes to drill the Dragon State 1-13 well (wildcat) on State lease ML-47967, San Juan County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.	
<b>5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)</b> (include UTM coordinates where possible) <b>(indicate county)</b> 666' FNL 693' FWL, NW/4 NW/4, Section 13, Township 34 South, Range 25 East, San Juan County, Utah	
<b>6. Possible significant impacts likely to occur:</b> Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.	
<b>7. Identify local government affected</b> a. Has the government been contacted? No. b. When? c. What was the response? d. If no response, how is the local government(s) likely to be impacted?	
<b>8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:</b> a. Has the representative and senator been contacted? N/A	
<b>9. Areawide clearinghouse(s) receiving state action:</b> (to be sent out by agency in block 1) Southeastern Utah Association of Governments	
<b>10. For further information, contact:</b>     Diana Mason Phone: (801) 538-5312	<b>11. Signature and title of authorized officer</b>   Gil Hunt, Associate Director Date: September 11, 2007



**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

FORM 3

AMENDED REPORT ☐  
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: <b>ML 47967</b>	6. SURFACE: <b>Fee</b>
1A. TYPE OF WORK: <b>DRILL</b> <input checked="" type="checkbox"/> <b>REENTER</b> <input type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL:    OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: <b>CrownQuest Operating, LLC</b>				9. WELL NAME and NUMBER: <b>Dragon State 1-13</b>	
3. ADDRESS OF OPERATOR: <b>P.O. Box 2221</b> CITY <b>Farmington</b> STATE <b>NM</b> ZIP <b>87499</b>			PHONE NUMBER: <b>(505) 325-5750</b>		10. FIELD AND POOL, OR WILDCAT: <b>Wildcat</b>
4. LOCATION OF WELL (FOOTAGES)  AT SURFACE: <b>666' FNL x 693' FWL</b>  AT PROPOSED PRODUCING ZONE: <b>same</b>				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWNE 13 34S 25E</b> <b>SW SW</b>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: <b>10 miles east of Monticello</b>				12. COUNTY: <b>San Juan</b>	
				13. STATE: <b>UTAH</b>	
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) <b>666'</b>		16. NUMBER OF ACRES IN LEASE: <b>680</b>		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: <b>160</b>	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) <b>1839'</b>		19. PROPOSED DEPTH: <b>5,960</b>		20. BOND DESCRIPTION: <b>RLB 0007554</b>	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): <b>6746' GL</b>		22. APPROXIMATE DATE WORK WILL START: <b>2/15/2008</b>		23. ESTIMATED DURATION: <b>60 days</b>	

24. PROPOSED CASING AND CEMENTING PROGRAM						
SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT	
16"	13 3/8"	H40	48	150	class 'G', 250 sks	1.15 cf/sk    15.8 ppg
12 1/4"	9 5/8"	J55	36	2,200	65/35 Poz, 550 sks	1.75 cf/sk    12.8 ppg
				5460	class 'G', 100 sks	1.15 cf/sk    15.8 ppg
7 7/8"	5 1/2"	P110	17	5,920	25/75 Poz, 575 sks	1.74 cf/sk    11.8 ppg
					LiteCrete, 300 sks	1.61 cf/sk    12.5 ppg

25. ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Robert R. Griffiee                      TITLE Operations Manager

SIGNATURE *Robert R. Griffiee*                      DATE 8/24/2007

(This space for State use only)

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

API NUMBER ASSIGNED: 43-03271864

APPROVAL:






Date: 11-21-07  
By: *[Signature]*

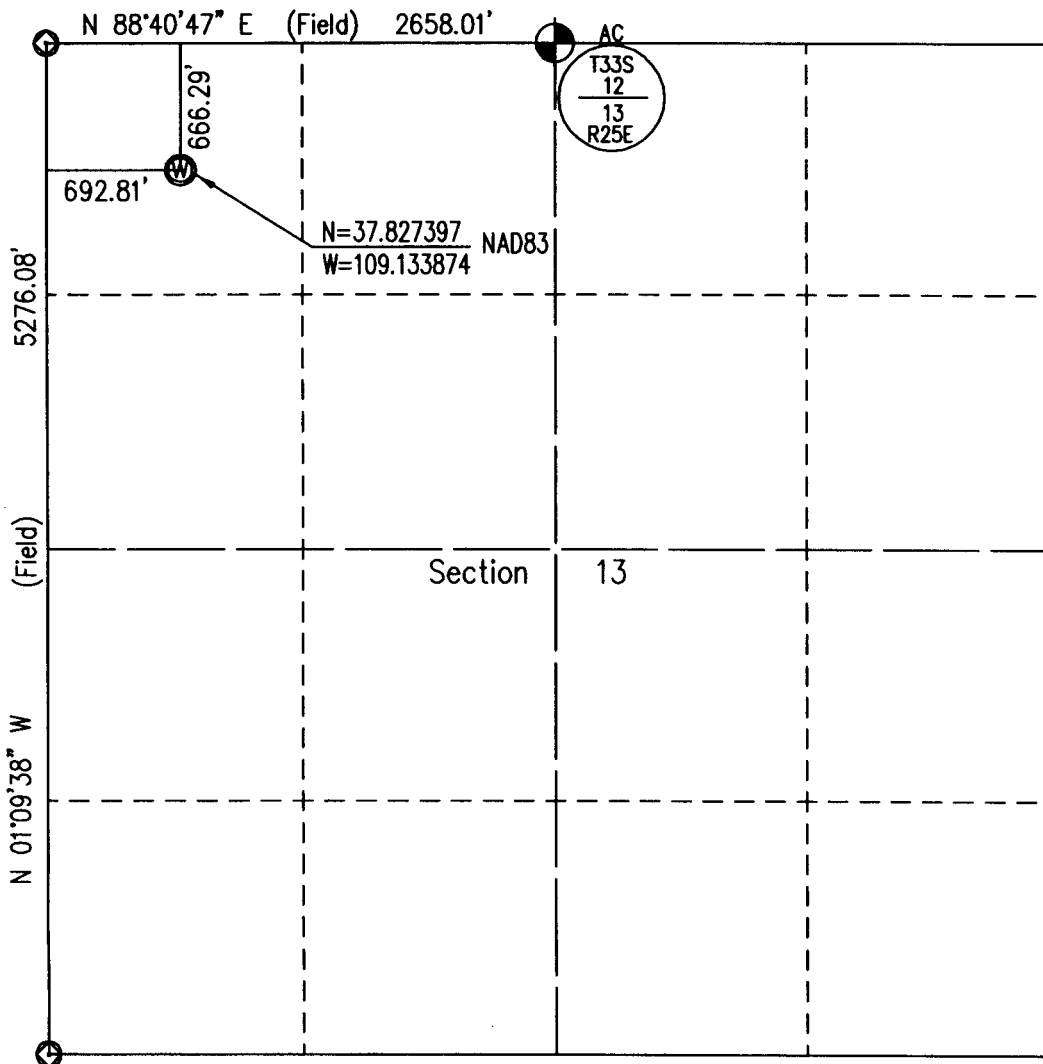
# UTAH WELL LOCATION PLAT

OPERATOR Crown Quest Operating  
 LEASE Dragon State WELL NO. 1-13  
 SECTION 13 TOWNSHIP 34 South RANGE 25 East Salt Lake, P.M.  
 COUNTY San Juan UTAH  
 FOOTAGE LOCATION OF WELL: 666.29' FEET FROM THE North LINE and  
692.81' FEET FROM THE West LINE and  
 GROUND LEVEL ELEVATION: 6745.90'  
 SURFACE USE WITHIN 200' RADIUS: No Improvements Within 200'  
 BASIS OF BEARING: GPS Data  
 BASIS OF ELEVATION: GPS Data - NAD 83 - PODP #4

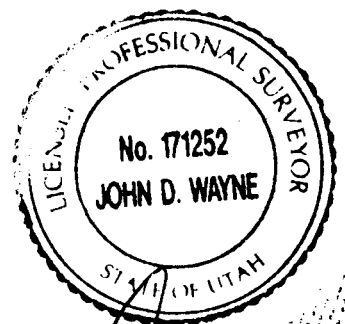
500' 500'  
 1" = 1000'

Some information on this plat is based on information taken from previous surveys, record information, or collateral evidence and may not reflect that which may be disclosed by a complete boundary survey. This plat is not to be relied on for the establishment of surface boundaries, fences, buildings, or other future improvements.

-  GLO BC
-  WELL Location
-  STONE Marked
-  ALUMINUM CAP
-  CALCULATED CORNER



I hereby certify that the proposed well location shown on this plat was prepared from field notes of an actual survey by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief, and that there are no visible improvements within 200 feet of this proposed wellhead, unless noted otherwise.



John D. Wayne  
 Professional L.S. #171252  
 State of Utah

AUGUST 16, 2007

Date Surveyed:

AUGUST 20, 2007

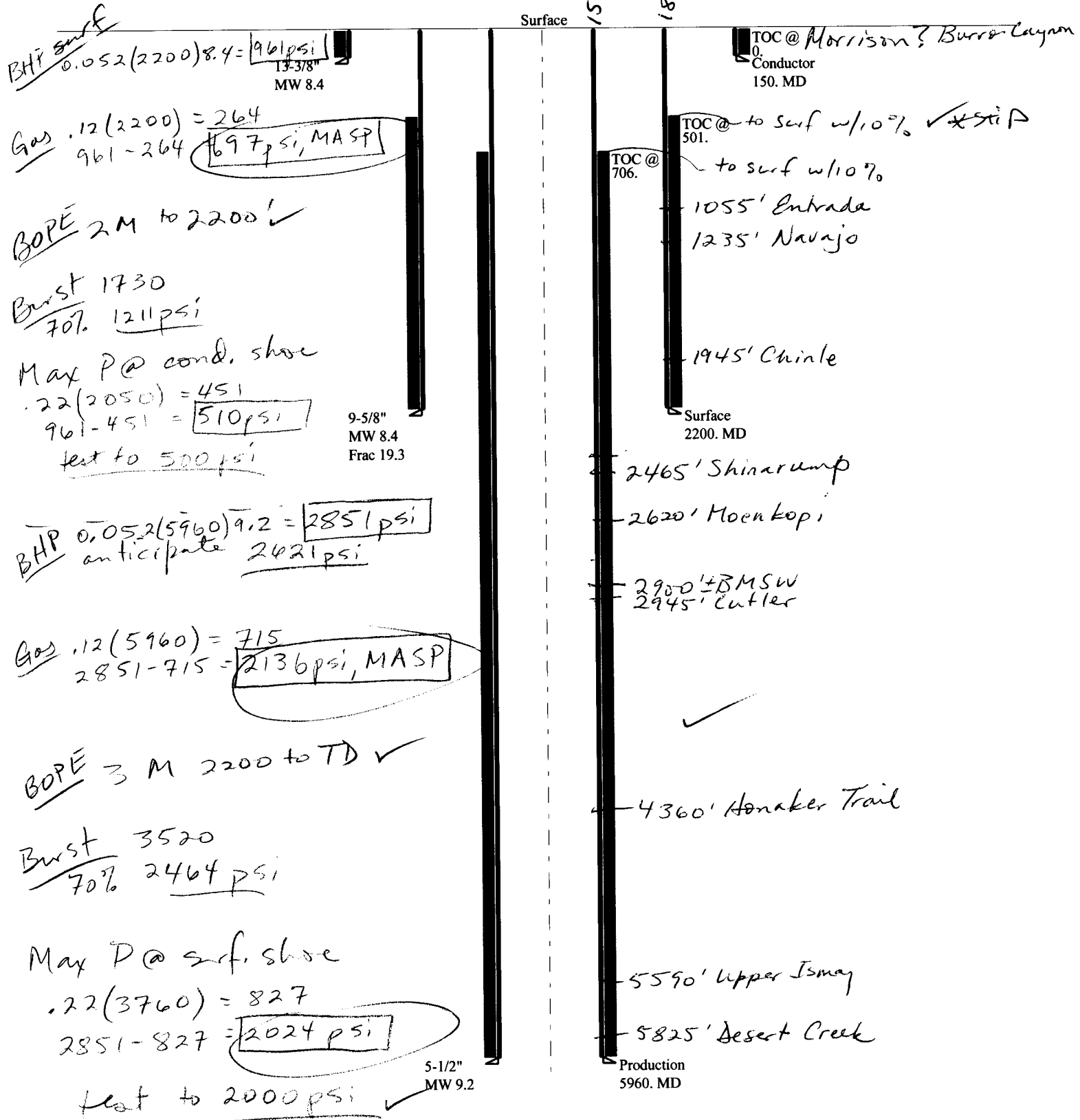
Date Platted:

SCALE: 1" = 1000'



# 2007-11 CrownQuest Dragon ST 1-13

## Casing Schematic



✓ Adequate Prod 11/21/07

Well name:	<b>2007-11 CrownQuest Dragon ST 1-13</b>		
Operator:	<b>CrownQuest Operating , LLC</b>		
String type:	Conductor	Project ID:	43-037-31869
Location:	San Juan County		

**Design parameters:**
**Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 77 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 47 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 65 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on buoyed weight.  
Neutral point: 132 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	150	13.375	48.00	H-40	ST&C	150	150	12.59	132.3
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	65	740	11.306	65	1730	26.43	6	322	50.99 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Minerals

Phone: 801-538-5357  
FAX: 801-359-3940

Date: November 16, 2007  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 150 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>2007-11 CrownQuest Dragon ST 1-13</b>	
Operator:	<b>CrownQuest Operating , LLC</b>	Project ID:
String type:	<b>Surface</b>	<b>43-037-31869</b>
Location:	<b>San Juan County</b>	

**Design parameters:**
**Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 106 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 250 ft

Cement top: 501 ft

**Burst**

Max anticipated surface pressure: 1,936 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,200 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on buoyed weight.  
Neutral point: 1,926 ft

**Non-directional string.**
**Re subsequent strings:**

Next setting depth: 5,960 ft  
Next mud weight: 9.200 ppg  
Next setting BHP: 2,848 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,200 ft  
Injection pressure: 2,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2200	9.625	36.00	J-55	LT&C	2200	2200	8.796	954.8
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	960	2020	2.105	2200	3520	1.60	69	453	6.53 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil,Gas & Minerals

Phone: 801-538-5357  
FAX: 801-359-3940

Date: November 16,2007  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.  
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>2007-11 CrownQuest Dragon ST 1-13</b>		
Operator:	<b>CrownQuest Operating , LLC</b>		
String type:	Production	Project ID:	43-037-31869
Location:	San Juan County		

**Design parameters:**
**Collapse**

Mud weight: 9.200 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 158 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 706 ft

**Burst**

Max anticipated surface pressure: 1,537 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 2,848 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on buoyed weight.  
Neutral point: 5,129 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	5960	5.5	17.00	P-110	LT&C	5960	5960	4.767	777.9
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2848	7480	2.626	2848	10640	3.74	87	445	5.10 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Minerals

Phone: 801-538-5357  
FAX: 801-359-3940

Date: November 16, 2007  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 5960 ft, a mud weight of 9.2 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*



**From:** Robert Clark  
**To:** Mason, Diana  
**Date:** 9/17/2007 10:24 AM  
**Subject:** RDCC short turn-around comments

**CC:** Anderson, Tad; McNeill, Dave; Wright, Carolyn  
The following comments are submitted on short turn-around items **RDCC #8425 through RDCC #8432.**

**RDCC #8425, Comments begin:** The Petro-Canada Resources (USA), Inc. proposal to drill the State 32-11 wildcat well, in Emery County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8426, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Raider 1-17 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8427, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Dragon State 1-13 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8428, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Banana Slug Federal 1-8 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing

vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8429, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Anteater State 1-21 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8430, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Chanticleer State 1-32 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8431, Comments begin:** The CrownQuest Operating, LLC proposal to drill the Explorer State 1-16 wildcat well, in San Juan County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

**RDCC #8432, Comments begin:** The Delta Petroleum Corporation proposal to drill the Greentown State #31-362216 wildcat well, in Grand County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board. If any compressor or pump stations are constructed at the site, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. A copy of the rules is found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm). **Comments end.**

Robert Clark  
Division of Air Quality  
801-536-4435

# CROWNQUEST

CROWNQUEST OPERATING, LLC

---

Date: 10/31/07

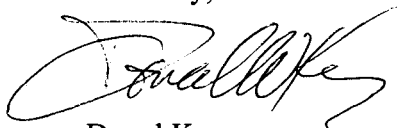
To Whom It May Concern:

Re: Dragon State # 1-13  
Section 13, T34S, R25E  
San Juan County, Utah

This letter is to certify CrownQuest Operating, LLC has in hand a signed Surface Agreement from Mr. & Mrs. Robert E Christensen, HC 63, 116 North 1160 West, Saint George, Utah 84770. Mr. & Mrs. Christensen are the surface owners of the above referenced well. A copy of the Surface Use Plan, location plat and map, as submitted in the APD, has been sent to Mr. & Mrs. Richardson.

Please attach this certification to the APD and proceed with processing our request for the permit. If you need additional information, please contact: Donal Key, at the above address or at [donalkey@msn.com](mailto:donalkey@msn.com). Ph: 505-716-2543.

Sincerely,



Donal Key  
Surface Operations

RECEIVED

NOV 05 2007

DIV. OF OIL, GAS & MINING



JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil Gas and Mining

JOHN R. BAZA  
*Division Director*

November 21, 2007

CrownQuest Operating, LLC  
P O Box 2221  
Farmington, NM 87499

Re: Dragon State 1-13 Well, 666' FNL, 693' FWL, NW NW, Sec. 13, T. 34 South, R. 25 East, San Juan County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-037-31869.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: San Juan County Assessor  
SITLA

Operator: CrownQuest Operating, LLC  
Well Name & Number Dragon State 1-13  
API Number: 43-037-31869  
Lease: ML 47967

Location: NW NW Sec. 13 T. 34 South R. 25 East

### Conditions of Approval

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at: (801) 538-5338 office (801) 942-0873 home
- Carol Daniels at: (801) 538-5284 office
- Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will be required to comply with any applicable recommendations resulting from this review.
7. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
8. Surface casing shall be cemented to the surface.



JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

February 2, 2009

CrownQuest Operating, LLC  
P.O. BOX 2221  
Farmington, NM 87499

Re: APD Rescinded – Dragon State 1-13, Sec.13, T.34S, R. 25E  
San Juan County, Utah API No. 43-037-31869

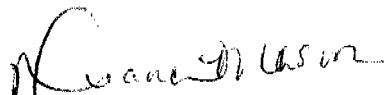
Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on November 21, 2007. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 2, 2009.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Mason  
Environmental Scientist

cc: Well File  
SITLA, Ed Bonner

